

BEETLES IN DRIFT

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One of the most productive forms of beetle collecting and one that is frequently neglected is that of collecting from high water drift. When conditions are right, hundreds of beetles can be collected in this manner. An annual event at our little farm is the gathering in of a gunny sack full of debris from the swollen waters of the little creek, Cozine Creek by name, that runs through the place.

With the coming of the first real winter rains, the creeks begin to swell. As the rains continue the waters rise higher and higher and soon a raging torrent is rushing down the little valley washing out the dead grasses, twigs and whatever else is loose and light. Many insects and arthropods are invariably caught in this torrent who in their mad fight for life grab at anything within reach. Frequently the floating grasses and twigs offer the only refuge and to these they cling tenaciously. As this insect-laden debris floats down stream it catches on fences, branches or any other fixed object in its path and before long a large deposit of drift has collected that is laden with a concentration of insects. The beetles and bugs usually predominate the collection because they do not have easy escape of the free winged forms and they are hardy enough to withstand the punishment of such an experience.

On December 2, 1948 the high waters came. After work that evening I went down to the edge of the creek armed with a gunny sack. My destination was a spot where the creek narrows to pass under a bridge. A fence crosses the creek here and a large pile of drift had accumulated and was still growing. Soon the sack was filled with debris and brought to the house.

I, always one to put off things, have never purchased or made a drying funnel so I have to depend on a large plywood board and an aspirator to do my collecting. A handful of drift was tossed on the middle of the board and I sucked on the aspirator as the warmed up beetles scrambled elusively in every direction. About five hours of nearly steady sucking was required before the task was completed to my satisfaction and even so numerous specimens were doubtless overlooked or escaped. Nevertheless several hundred beetles fell victims to my efforts.

Staphylinidae were the most abundant with *Philonthus* the principal genus. Several species of this genus were present ranging from the small *P. microphthalmus* Horn to the large *P. tetragonocephalus* Notm. The Aleocharinae were represented by several species as were the Paederinae. In the Carabidae, *Bembidion* was the dominant genus with three or four species. The largest range in size was here represented with *Carabus nemoralis* Mull. the largest species taken and *Tachys* sp. vying with Orthoperidae for the smallest honors. Several species of *Cercyon* were taken along with four or five other members of the Hydrophilidae. Other families represented were Orthoperidae, Pselaphidae, Histeridae, Anthicidae, Elateridae, Trixagidae (Throscidae), Helodidae, Nitidulidae, Cryptophagidae, Lathridiidae, Coccinellidae, Tenebrionidae, Scarabaeidae, Chrysomelidae, Mylabridae, Curculionidae and Scolytidae. The Cantharidae were represented by larvae apparently of the genus *Cantharis*.

The source of Cozine Creek is in the east slope foot hills of the Coast Range from where it wends its way to the Yamhill River, a tributary of the Willamette which flows to the Columbia River and finally to the sea. In its meanderings it covers several miles and collects additional water from small tributaries before it reaches our place, not far from its mouth. As the creek was swollen throughout its course it is quite plausible that we were collecting beetles from an area of considerable extent, these being concentrated in the debris.

The pleasant part of this kind of collecting is that it occurs during the off season, when one is occupied with setting, labeling and arranging the previous season's collections. It provides a pleasant and profitable diversion from these more or less tedious tasks. It is a form of collecting that should be more universally employed.